

5/19

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b>	<b>23058</b>
<b>Description:</b> Ø3.250 Support	<b>Part Number:</b>	<b>D2940-1</b>
<b>Dwg:</b> D2940 Rev. A1	<b>Qty:</b>	<b>20</b> <del>10</del>
Page 1 of 1		

03-06-09


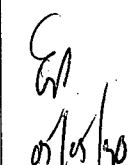
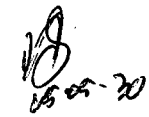
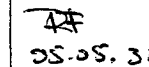
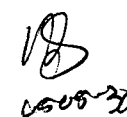
Step	Location	Procedure	By	Date	Qty
1	DC	Issue Traveller. Blank size makes (2) D2940-1 <b>Dwg not required</b>	<i>[Signature]</i>	05.04.13	10
2	PG	Issue P/O: <u>2007889</u> Description: D6104-007 Material: 17-4 PH SS (AMS 5643 OR AISI 630) as per Dwg D6104 <b>Material release note required.</b>	<i>[Signature]</i>	05.04.13	10
3	RG	Receive and Inspect for raw material dimensions. <b>Ensure material release note is attached.</b>	<i>[Signature]</i>	05.04.13	10
4	MS	Turn blank for Haas as per Folio FA079	<i>[Signature]</i>	05.05.13	10
5	QC1	Inspect all dimensions as per Dwg D2940	<i>[Signature]</i>	05.05.13	10
6	MV	Machine as per Folio FA079	<i>[Signature]</i>	05.05.13	10
7	MV	Tumble & Deburr	<i>[Signature]</i>	05.05.13	10
8	QC1	Inspect all dimensions to inspection sheet as per Dwg D2940	<i>[Signature]</i>	05.05.13	10
9	QC8	Inspect dimensions for second check.	<i>[Signature]</i>	05.05.13	10
10	FP	Powder Coat White (4.3.5.2) per QSI 005 4.3	<i>[Signature]</i>	05.06.02	10
11	QC3	Inspect Powder Coat	<i>[Signature]</i>	05-06-03	20
12	ST	Identify and stock	<i>[Signature]</i>	05-06-03	20
13	AC	Cost / part <u>149.46</u>	<i>[Signature]</i>	05-06-07	20
14	DC	Close W/O <u>146.94</u> Inspect Level 21	<i>[Signature]</i>	05.06.08	20

Rev	Date	Change	Revised By	Approved
A	01.01.08	Preliminary Issue	EC	
B	01.08.15	Removed Heat treating	EC	
C	02.11.26	Reformat; Added P/O	KJ	<i>[Signature]</i>

RELEASED  
02/11/29 RF

JHC

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			
05/05/24	6	One Part - holes of Center (x) by 0.015"		IT IS ACCEPTABLE FOR THIS TIME ONLY 05.05.30	 05/05/20	 05.05.30	 05.05.30	 05.05.30

Part No: D2940-1 PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☐ No ☒ DQA:  Date: 05/06/08

NOTE: Date & initial all entries QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b>	<b>23058</b>
<b>Description: Ø3.250 Support</b>	<b>Part Number:</b>	<b>D2940-1</b>
<b>Inspection Dwg: D2940 Rev. A1</b>		<b>Page 1 of 1</b>

Inspect dimensions highlighted on inspection sheet drawing D2940 Rev. A1/ DSK081 Rev. B & record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
Lathe Section									
A	3.211	3.216		3.216	3.216	3.216	3.216	S.G. 05/05/19	
B	4.946	4.966		4.966	4.965	4.964	4.966		
C	0.718	0.738		0.725	0.724	0.728	0.725		
D	0.090	0.110		0.110	0.103	0.104	0.105		
E	3.564	3.584		3.571	3.571	3.574	3.572		
F	0.022	0.042		0.032	0.032	0.032	0.032		
G	3.444	3.464		3.452	3.455	3.455	3.455		
H	0.112	0.132		0.116	0.120	0.118	0.114		
I	2.170	2.190		2.183	2.184	2.181	2.184		
J	4.451	4.471		4.458	4.458	4.457	4.458		
K	0.413	0.433		0.423	0.427	0.425	0.423		
L	0.913	0.933		0.927	0.925	0.926	0.925		
M									
N									
HAAS Section									
AA	0.240	0.260		R.25	R.250	R.250	R.250		
AB	0.490	0.510		R.50	R.50	R.50	R.50		
AC	0.140	0.160		0.155	0.155	0.155	0.155		
AD	3.510	3.530		3.517	3.512	3.510	3.510		
AE	1.633	1.673		1.663	1.663	1.663	1.660		
AF	1.493	1.513		1.513	1.512	1.512	1.512		
AG	0.040	0.060		0.053	0.050	0.050	0.052		
AH	0.188	0.193	DT8706	✓	✓	✓	✓		
AI	0.140	0.160		0.156	0.157	0.157	0.157		
AJ	2.518	2.538		2.519	2.519	2.519	2.519		
AK	0.040	0.060		0.054	0.057	0.050	0.052		
AL	0.010	0.020		0.010	0.010	0.010	0.010		
AM	0.140	0.160		0.144	0.144	0.150	0.152		
AN	0.350	0.450		0.380	0.380	0.380	0.380		
AO	0.240	0.260		R.25	R.25	R.25	R.250		
AP	0.150	0.170		0.152	0.150	0.162	0.160		
AQ	0.053	0.073		R.063	0.063	0.063	0.063		
AR	101.64	105.64	DT8698	No gauge to measure					
AS	0.257	0.262	DT8683	✓	✓	✓	✓		
AT	0.053	0.073		R.063	R.063	R.063	R.063		
AU	4.118	4.138		4.135	4.135	4.135	4.135		
AV									
AW									
Accept/Reject									

Measured by: S.G. / En.  
Date: 05/05/19

Audited by: [Signature]  
Date: 05.05.19

Rev	Date	Change	Revised by	Approved
A	02.12.12	New Issue	KJ/RF	[Signature]

RELEASED  
03.07.01 RF

DART AEROSPACE LTD		Work Order:	23058
Description: Ø3.250 Support		Part Number:	D2940-1
Inspection Dwg: D2940 Rev. A1		Page 1 of 1	

Inspect dimensions highlighted on inspection sheet drawing D2940 Rev. A1/ DSK081 Rev. B. & record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	15	26	37	48	By	Date
Lathe Section									
A	3.211	3.216		3.216	3.215	3.215	3.216	JG 05/05/19	
B	4.946	4.966		4.964	4.966	4.964	4.965		
C	0.718	0.738		0.728	0.726	0.723	0.724		
D	0.090	0.110		0.103	0.104	0.104	0.104		
E	3.564	3.584		3.571	3.572	3.571	3.768		
F	0.022	0.042		0.032	0.032	0.032	0.032		
G	3.444	3.464		3.451	3.455	3.450	3.456		
H	0.112	0.132		0.118	0.121	0.118	0.117		
I	2.170	2.190		2.184	2.184	2.180	2.183		
J	4.451	4.471		4.457	4.457	4.456	4.457		
K	0.413	0.433		0.436	0.428	0.427	0.429		
L	0.913	0.933		0.929	0.930	0.929	0.929		
M									
N									
HAAS Section									
AA	0.240	0.260		0.256	0.250	0.250	0.250		
AB	0.490	0.510		0.50	0.50	0.50	0.520		
AC	0.140	0.160		0.157	0.157	0.158	0.155		
AD	3.510	3.530		3.521	3.519	3.520	3.520		
AE	1.633	1.673		1.653	1.656	1.661	1.660		
AF	1.493	1.513		1.508	1.499	1.506	1.505		
AG	0.040	0.060		0.054	0.049	0.043	0.045		
AH	0.188	0.193	DT8706						
AI	0.140	0.160		0.151	0.149	0.149	0.150		
AJ	2.518	2.538		2.528	2.528	2.528	2.528		
AK	0.040	0.060		0.044	0.045	0.045	0.043		
AL	0.010	0.020		0.016	0.010	0.010	0.010		
AM	0.140	0.160		0.154	0.150	0.153	0.150		
AN	0.350	0.450		0.386	0.380	0.380	0.380		
AO	0.240	0.260		0.250	0.250	0.250	0.250		
AP	0.150	0.170		0.156	0.157	0.154	0.153		
AQ	0.053	0.073		0.063	0.063	0.063	0.063		
AR	101.64	105.64	DT8698	no	Gauge	to measure			
AS	0.257	0.262	DT8683						
AT	0.053	0.073		0.063	0.063	0.063	0.063		
AU	4.118	4.138		4.120	4.128	4.130	4.131		
AV									
AW									
Accept/Reject									

Measured by:	J. G. / EP
Date:	05/05/19 / 05/07/25

Audited by:	[Signature]
Date:	05.05.19

Rev	Date	Change	Revised by	Approved
A	02.12.12	New Issue	KJ/RF	[Signature]

<b>DART AEROSPACE LTD</b>		<b>Work Order:</b>	<b>23058</b>
<b>Description:</b> Ø3.250 Support		<b>Part Number:</b>	D2940-1
<b>Inspection Dwg:</b> D2940 Rev. A1		Page 1 of 1	

Inspect dimensions highlighted on inspection sheet drawing D2940 Rev. A1/ DSK081 Rev. B & record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	19	10	3	4	By	Date
Lathe Section									
A	3.211	3.216		3.215	3.216				
B	4.946	4.966		4.966	4.957				
C	0.718	0.738		0.728	0.727				
D	0.090	0.110		0.104	0.110				
E	3.564	3.584		3.575	3.574				
F	0.022	0.042		0.032	0.032			SG	05/05/19
G	3.444	3.464		3.456	3.455				
H	0.112	0.132		0.117	0.118				
I	2.170	2.190		2.181	2.182				
J	4.451	4.471		4.457	4.458				
K	0.413	0.433		0.423	0.422				
L	0.913	0.933		0.924	0.925				
M									
N									
HAAS Section									
AA	0.240	0.260		0.250	0.250	0.250	0.252		
AB	0.490	0.510		0.50	0.50	0.50	0.50		
AC	0.140	0.160		0.155	0.152	0.150	0.152		
AD	3.510	3.530		3.527	3.529	3.528	3.528		
AE	1.633	1.673		1.664	1.664	1.664	1.662		
AF	1.493	1.513		1.501	1.506	1.501	1.507		
AG	0.040	0.060		0.045	0.050	0.049	0.045		
AH	0.188	0.193	DT8706						
AI	0.140	0.160		0.150	0.151	0.150	0.149		
AJ	2.518	2.538		2.524	2.527	2.527	2.529		
AK	0.040	0.060		0.049	0.048	0.049	0.049		
AL	0.010	0.020		0.010	0.010	0.010	0.010		
AM	0.140	0.160		0.150	0.148	0.151	0.152		
AN	0.350	0.450		0.400	0.400	0.380	0.380		
AO	0.240	0.260		0.250	0.250	0.250	0.250		
AP	0.150	0.170		0.157	0.163	0.163	0.163		
AQ	0.053	0.073		0.063	0.063	0.063	0.063		
AR	101.64	105.64	DT8698	No gauge to measure					
AS	0.257	0.262	DT8683						
AT	0.053	0.073		0.063	0.063	0.063	0.063		
AU	4.118	4.138		4.135	4.135				
AV									
AW									
Accept/Reject									

Measured by:	SG
Date:	05/05/19

Audited by:	ED
Date:	05/05/19

Rev	Date	Change	Revised by	Approved
A	02.12.12	New Issue	KJ/RF	

# Job Costing Report

Dart Aerospace Ltd.  
Hawkesbury

Apr 12, 2005  
02:25 pm

Work Order No : 0023058  
Project Name : D2940-1  
Project For : WK519  
Work Order Type : Main  
Main WO Number :  
House Part Number : D2940-1  
Description : Support  
Manufactured : Yes  
Amount Req'd : 10  
Amount Done : 0  
Start Date : 04-12-05  
Est Finish Date : 05-05-05  
Act Finish Date :  
Drawings Req'd : No  
Ok for Approval :  
Approval Rec'd :

Department Code:  
Burden Flags : NNNNNNNN  
WO Status : Open  
Invoice State : Not Invoiced  
Invoice Date :  
Invoice Number :  
Invoice Amount : 0.00  
Order Entry No :  
OE Value : 0.00  
Est Mark Up : 0.000%  
Actual Mark Up : 0.000%  
\$0 Posted to Finished Goods

	Estimated	Actual	Var. %	Posted	To Post
Material Cost :	0.00	0.00	0.00	0.00	0.00
Engineering Hours :	0.00	0.00	0.00		
Engineering Cost :	0.00	0.00	0.00	0.00	0.00
Production Hours :	0.00	0.00	0.00		
Production Cost :	0.00	0.00	0.00	0.00	0.00
Packaging Hours :	0.00	0.00	0.00		
Packaging Cost :	0.00	0.00	0.00	0.00	0.00
OverHead Hours :	0.00	0.00	0.00		
OverHead Cost :	0.00	0.00	0.00	0.00	0.00
CNC Hours :	0.00	0.00	0.00		
CNC :	0.00	0.00	0.00	0.00	0.00
Misc. Hours :	0.00	0.00	0.00		
Misc. :	0.00	0.00	0.00	0.00	0.00
Burden :	0.00	0.00	0.00		
Total Cost :	0.00	0.00	0.00		
Mark up :	0.000	0.000			
Selling Cost :	0.00	0.00			

	Estimated	Actual
Labour Hrs/Amount Done :	0.00	0.00
Profits/(Loss) :	0.00	0.00



GLORIA MATERIAL TECHNOLOGY CORP.

# INSPECTION CERTIFICATE

台南縣新營市新中路35號1樓  
1FL, NO.35, HSIN CHUNG RD, HSIN YING,  
TAINAN, TAIWAN, ROC

TEL: (06)6520000  
FAX: (06)6520088

Messrs: PROGRESSIVE ALLOY STEEL UNLIMITED L.L.C.  
Order No: 2004003262 Grade: 17-4PH  
FILE NO: 2004004782-A Size: 4-1/2"  
MFAT-Lot No: S2301-40 Weight: 1026.OKG  
Condition: HF-Solution Annealed-Peeled

P.O.NO.: 3370  
Date: 11/30/2004  
P'cs: 3

Chemical Composition (wt%)			P	S	Ni	Cr	Mo	Cu	Nb+Ta
C	Si	Mn							
Min.				0.015	3.00	15.00		3.00	0.15
Max.	0.07	1.00	0.040	0.030	5.00	17.50	0.50	5.00	
Result	0.03	0.36	0.021	0.023	4.48	15.79	0.13	3.25	

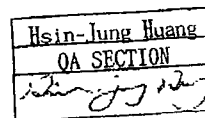
Mechanical Properties Spec.		Grain Size	$\delta$ -Ferrite	H900-Hardness(Avg )
Hardness(1/2R)				
Spec.Min.			5%	40HRC
Spec.Max.	363HB			47HRC
Result	333HB	7.5	0.64%	45.1HRC

Tensile Test	Elongation(A)	Tensile Strength(Rm)	Yield Strength(Rp)	Reduction of Area(Z)
	%	KSI	KSI	%
Unit		190	170	40
Min.	10			
Max.		210	184	53
Result	20			

Non-Metallic Inclusions : (AMS 2303C)  
Severity Frequency  
Max. 0.35 0.4  
Result 0 0

- Specification:  
1. ASTM A484M-03a, A564M-04, A370-03a.  
2. ASME SA484 (1998), SA564 (1998).  
3. AMS 5643Q, 2303C(Magnetic Particle Test).  
4. EN 10204/3.1.B.  
5. UNS S17400.  
6. SAE AMS-H-6875.

Remark:



Our quality and environment management system have been certified by ISO9001 QMS and 14001EMS  
We hereby certify that the material described herein has been manufactured and tested with satisfactory result in accordance with the requirement of  
the above material specification. We hereby Inspection Certificate comply with EN10204 3.1.B.



GLORIA MATERIAL TECHNOLOGY CORP.

INSPECTION CERTIFICATE

台南縣新營市新中路35號1樓

1FL., NO 35, HSIN CHUNG RD, HSIN YING,  
TAINAN, TAIWAN, ROC

TEL: (06)6520000

FAX: (06)6520088

Messrs: PROGRESSIVE ALLOY STEEL UNLIMITED L.L.C.

FILE NO: 2004004782-A

Size: 4-1/2"

Date: 11/30/2004

Order No: 2004003262

Grade: 17-4PH

P.O.NO.: 3370

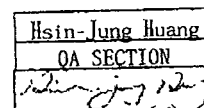
HEAT-Lot No: S2301-40

Weight: 1026.0KG

P'cs: 3

Condition: HF-Solution Annealed-Peeled

1. MANUFACTURING PROCESS: EAF+LHF+VOD, FORGED OR HOT ROLLED.
2. SOLUTION TREATMENT: 1900F FOR 30 MIN/INCH PLUS ONE ADDITIONAL HOUR (MINIMUM ONE HOUR), RAPIDLY COOLED TO BELOW 90F.
3. MATERIAL IS FREE FROM KNOWN CONTACT WITH MERCURY AND RAUUM.
4. MATERIAL IS FREE FROM WELDS OR WELD REPAIRS.
5. ULTRASONIC TEST: OK.
6. MACRO/MICRO OK.
7. MECHANICAL PROPERTIES TESTED AS PER H900 CONDITION.
8. REDUCTION RATION 4:1 MIN
9. FURNACES CALIBRATED TO MIL-H-6875.



Our quality and environment management system have been certified by ISO9001 QMS and 14001EMS.  
We hereby certify that the material described herein has been manufactured and tested with satisfactory result in accordance with requirement of the above material specification. We hereby Inspection Certificate comply with EN10204 3.1 B.



